Geometry

Name ANSWER KEY

Unit 3 Worksheet 3

Per. _____ Date _____

For #1-6, use the picture below. If m∠2 = 70°, find the measure of the other angles.

1) m∠3 = 70°

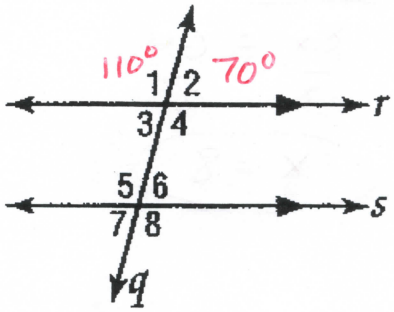
2) m∠5 = 110°

3) m∠8 = 110°

4) m∠1 = 110°

5) m∠4 = 110°

6) m∠6 = 70°



For #7-14, use the picture below. If m∠7 = 100°, find the measure of the other angles.

7) m∠9 = 100°

8) m∠6 = 80°

9) m∠8 = 80°

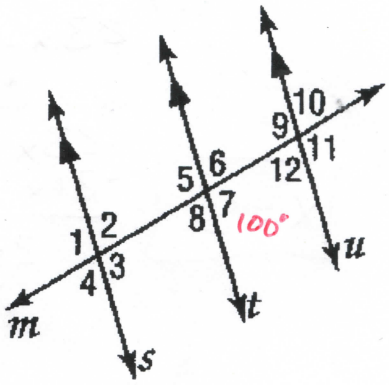
10) m∠2 = 80°

11) m∠5 = 100°

12) m∠1 = 100°

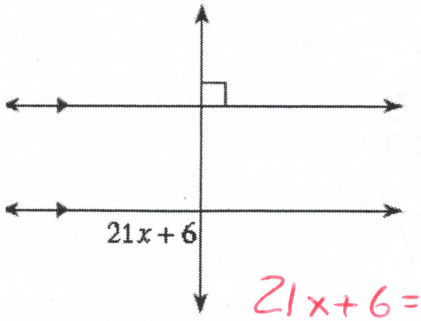
13) m∠10 = 80°

14) m∠11 = 100°



For numbers 15-21, solve for x.

1.



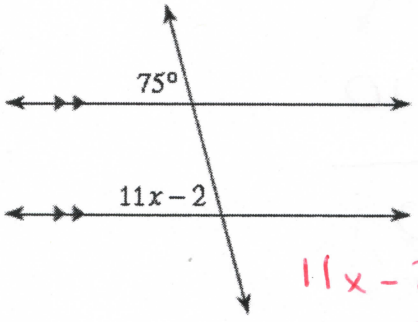
$21x+6=90$

$-6 \quad -6$

$\frac{21x}{21} = \frac{84}{21}$

$x = 4$

2.



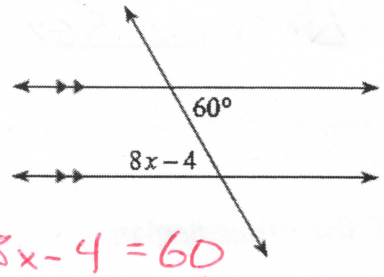
$11x-2=75$

$+2 \quad +2$

$\frac{11x}{11} = \frac{77}{11}$

$x = 7$

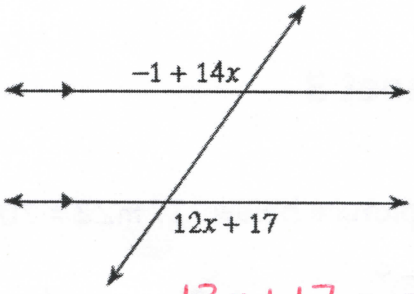
3.



$8x - 4 = 60$
$+4 \quad +4$
$\frac{8x}{8} = \frac{64}{8}$

$x = 8$

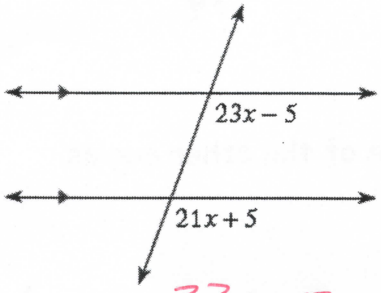
4.



$12x + 17 = -1 + 14x$
$-12x \quad -12x$
$17 = -1 + 2x$
$+1 \quad +1$
$\frac{18}{2} = \frac{2x}{2}$

$x = 9$

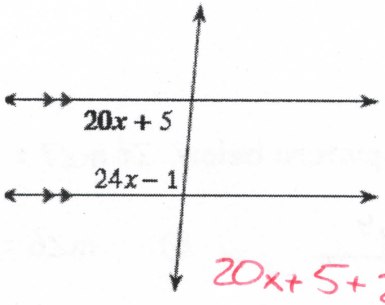
5.



$23x - 5 = 21x + 5$
$+5 \quad +5$
$23x = 21x + 10$
$-21x \quad -21x$
$\frac{2x}{2} = \frac{10}{2}$

$x = 5$

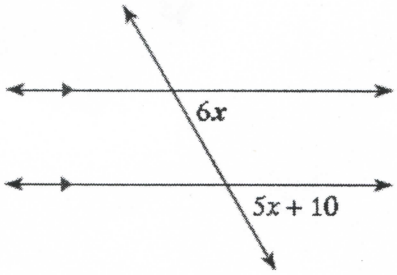
6.



$20x + 5 + 24x - 1 = 180$
$44x + 4 = 180$
$-4 \quad -4$
$\frac{44x}{44} = \frac{176}{44}$

$x = 4$

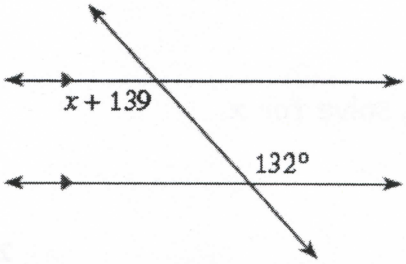
7.



$6x = 5x + 10$
$-5x \quad -5x$

$x = 10$

8.



$x + 139 = 132$
$-139 \quad -139$

$x = -7$